Municipal Facilities Operation & Management

2.1.5 Landscape and Recreational Facilities

2.1.5.1 Introduction

The goal of the program for landscape and recreational facilities management is to ensure storm water pollution prevention practices are considered when conducting operation and maintenance activities while maintaining the standard of enriching lives through quality parks and programs. Storm Water Best Management Practices are commonly referred to as Best Management Practices (BMPs) or Storm Water Practices (these terms may be used interchangeably). The City also uses Integrated Pest Management (IPM) techniques that incorporate non-chemical and less toxic alternatives whenever possible in pest control strategies.

The City's program must meet the requirement of the San Diego County municipal storm water permit (Permit), as summarized in Table 2.1.5-1.

Table 2.1.5-1. Permit Requirements – Landscape and Recreational Facilities.

Section	***Requirement (Summary)***	***Permit Section***
2.1.5.2	Implement pollution prevention methods	F.3.c.(1)
2.1.5.2	Implement maintenance at all structural controls designed to reduce pollutant discharges	F.3.a. (5)(a)
2.1.5.2	Designate and implement minimum BMPs to protect water quality	F.3.a.(4)
2.1.5.2	Inspect areas and activities annually	F.3.a.(7)
2.1.5.2	Develop and implement BMPs to reduce pollutants associated with the application, storage and disposal of pesticides, herbicides and fertilizers	F.3.a.(6)
2.1.5.2	Implement and designate an Educational Program requirement for all pertinent target communities	F.4.a. F.4.b. F.4.c.
2.1.5.3	Develop a budget for storm water expenditures at the Parks & Recreation Department for each fiscal year covered by the Municipal Permit	F.8
2.1.5.4	Document activities for Jurisdictional Urban Runoff Management Program Annual Report	I

This program component is applicable to all City departments that own and operate recreational facilities. Maintenance practices at parks and recreation facilities generally include fertilizer and pesticide applications, vegetation maintenance and disposal, swimming pool chemical maintenance and draining, trash and debris management, and landscape cleaning. All of these maintenance practices have the potential to contribute pollutants to the storm drain system. If improperly managed, potential pollutants can be

transported in runoff to the storm drain system and subsequently discharged to receiving waters.

The objectives of this program component are to:

- Eliminate or minimize the discharge of pesticides, herbicides and fertilizers to the storm drain system and receiving waters.
- Prevent the disposal of landscape waste into the storm drain system.
- Minimize trash, debris and other pollutants from entering City-owned recreational water bodies.
- Discharge municipal swimming pool water in a manner that will not contribute pollutants to receiving waters.
- Establish storm water Best Management Practices (BMPs) to minimize pollutants entering the storm drain system.
- Conduct an annual evaluation of activities to determine if modifications need to be made to address water quality issues.
- Establish a City policy regarding the use of pesticides and fertilizers on City operated facilities.
- Provide Integrated Pest Management (IPM) training the appropriate City staff that applies pesticides and fertilizers.

2.1.5.2 Activities

In order to effectively implement the activities, procedures and education and training outlined below, the Park & Recreation Department management shall maintain a designated coordinator or coordinators to keep informed about the Municipal Permit so that he/she can provide guidance to Park & Recreation Department management and staff in implementing the Landscape & Recreational Facilities Component of the Urban Runoff Management Program document. The name(s) of the coordinator shall be submitted to the Storm Water Program by Thursday, February 21, 2002 - the Urban Runoff Management Program implementation date. The Park & Recreation Department management shall provide the names of new representatives whenever the designated coordinator is replaced. The Storm Water Program will interact with the coordinator(s) to provide the latest Municipal Permit information and to request annual compliance reports from the Park & Recreation Department management.

Landscape and recreational facilities include, but are not limited to:

- Parks
- Golf courses
- Swimming pools
- Riding trails
- Recreational water bodies
- Picnic areas

- Sports fields
- Parking lots and walkways

Some of the activities associated with these facilities include, but are not limited to:

- Integrated Pest Management (IPM) program
- Operation and maintenance of facilities
- Record keeping
- Irrigation and landscape maintenance

The following BMPs will be implemented for municipal activities conducted at parks and recreational facilities.

1. Routine Inspection and Cleaning, Review of Activities

- Facilities will be inspected annually and cleaned as needed.
- Maintenance activities will be reviewed annually to verify that appropriate storm water BMPs and practices are being utilized.

2. Pesticide Use and Storage

The following procedures will be implemented, when applicable, to ensure that pesticides, herbicides and fertilizers are properly applied and handled to eliminate or minimize their exposure to storm water. Application and handling procedures will be in compliance with federal, state and county regulations, as follows:

- Apply and handle pesticides and keep detailed records in accordance with existing state regulations (California Title 3, Division 6, Pesticides and Pest Control Operations). The regulations cover a list of approved chemicals, product and application information, equipment use and maintenance procedures, and record keeping. A list of approved pesticides, herbicides, and fertilizers must be included with the detailed records.
- Apply and handle fertilizers in strict accordance with the label directions.

The County's agricultural regulations are followed for the application and handling of these materials.

3. Proper Use of Pesticides and Fertilizers

The following pest control strategies will be implemented, when applicable, to emphasize the use of a hierarchy of controls, with a preference for mechanical controls (e.g., mowing) and biological controls (e.g., beneficial insects, pheromones) before chemical controls (e.g., pesticides, herbicides). This practice is often referred to as Integrated Pest Management (IPM), a pest management practice that considers the entire ecosystem when determining potential pest control strategies.

- Use mechanical control of vegetation whenever possible, such as mowing with tractor-type or push-mowers and hand-cutting with gas- or electric-powered weed trimmers.
- Use hand-weeding where practicable.
- Consider the use of beneficial insects to control pests as part of a Preventive Maintenance Program.
- Proper plant selection.
- Identification and monitoring of pest problems.
- Control measures.
- Incorporate the above practices into application contracts.

Guidance on minimizing product use is available at the Park & Recreation Department.

4. Storage and Inspection of Pesticides and Fertilizers

The following BMPs will be implemented, when applicable, to handle pesticides and fertilizers in a manner that eliminates or minimizes their exposure to storm water. Storage and inspection will be in compliance with federal, state and county regulations.

- Store materials in enclosed sheds or buildings or under cover on an impervious surface.
- Provide secondary containment around materials if stored outdoors or if material from a spill could flow outdoors.
- Keep only the minimum amount of hazardous materials on site.
- Periodically check areas for spills, leaks, or unsafe storage methods.

Guidance on storage and a summary of the state regulations are available at the Park & Recreation Department.

5. Irrigation and Fertilization

The following procedures will be implemented, when applicable, during irrigation and fertilization applications to eliminate or minimize the discharge of pollutants that can enter the storm drain system:

- Avoid over-watering landscaped areas, especially when irrigating after fertilizer/pesticide applications. Adjust watering locations and amounts to minimize non-storm water runoff.
- Avoid chemical applications during the wet season to minimize the amount of pollutant runoff in storm water.
- Avoid applying chemicals during storm events.

6. Landscape Waste

Landscape waste consists of clippings, cuttings and droppings of leafy and woody materials. The following procedures, where practicable, will be implemented by City

employees and required of City contractors. They are designed to assure that exposed material and accumulated sediment and trimmings will be handled in an environmentally sensitive manner to prevent their entry into the storm drain system and reduce the generation of waste:

- Landscape waste should be disposed of by either taking it to a City-approved off-site composting location, or taking it to a permitted landfill.
- Permitted landfills should be used only after all opportunities for composting have been exhausted.
- Place temporarily stockpiled material away from watercourses, and berm or cover stockpiles to prevent material releases to the storm drain system.

7. Native Vegetation

The following procedures will be implemented, when applicable, to retain and plant native vegetation to reduce water, fertilizer and pesticide needs.

- Determine existing native vegetation features (location, species, size, function, and importance) and consider the feasibility of protecting them.
- Consider elements such as their effect on drainage and erosion, hardiness, maintenance requirements, and possible conflicts between preserving vegetation and the resulting maintenance needs.
- Where feasible, retain and/or plant selected native vegetation whose features are determined to be beneficial.

8. Municipal Swimming Pools

The following procedures will be implemented, when applicable, to manage discharges of municipal swimming pool water:

- When practicable, discharge filter backwash water and chemically treated water to the sanitary sewer.
- If discharging to the storm drainage system, dechlorinate the water through mechanical means (such as letting the water sit for several days without adding chlorine) or chemical means (such as by adding sodium bisulfite).
- Neutralize all other chemicals in discharges, such as acid wash residue, before discharging to the storm drain system.
- Incorporate the above practices into maintenance contracts.

Guidance on dechlorination practices is available at the Park & Recreation Department.

9. Recreational Water Bodies

Beaches, picnic areas, lakes, and ponds receive a large number of visitors and may collect a large amount of litter, debris and other pollutants. To minimize the amount of

potential pollutants that reach the water body, the following procedures will be implemented, when feasible:

- Provide and maintain trash receptacles to hold refuse generated by the public.
- Collect trash and debris from bins and along water bodies to minimize the amount of trash and debris that may contact the water
- Collect trash and debris from within waterbodies where feasible.
- When necessary, increase collection during peak visitation months (generally June, July and August).

10. Routine Inspection and Cleaning, Review of Activities

The following self-inspections processes will be performed at Operations Centers:

- Facilities will be inspected annually and cleaned as needed.
- Maintenance activities will be reviewed annually to verify that appropriate storm water BMPs and practices are being utilized.
- Report modifications and corrective actions identified during self-inspection to the Storm Water Program annually as part of the Program Assessment.

11. Twenty-Four Hour Non-Storm Water Discharge Reporting

Certain non-storm water discharges, because of their nature or magnitude, require timely reporting to the Regional Board. A report will also be forwarded to the Strom Water Program for record keeping purposes. Non-storm water discharges that pose a significant threat to water quality or human health, will be evaluated by City staff against the "24-Hour Non-Storm Water Discharge Reporting Checklist". A significant threat to water quality or human health is determined on a case-by-case basis and will be dependent on the type of pollutant, the degree of the violation (i.e. the amount of pollutant discharged into the municipal storm drain system), the proximity to receiving water bodies, the potential for exposure to the public, and the potential for environmental damage. Examples of discharges that will be reported include sewage spills and non-storm water discharges, such as a significant sediment load into Los Penasquitos Lagoon.

Where staff determines that discharges pose a significant threat to water quality or human health, the Storm Water Program or responsible City department will notify the Regional Board orally and by facsimile within 24 hours of the discharge event. Additionally, a written report of the event and follow up actions will be sent to the designated Regional Board contact for the Municipal Storm Water Permit, if needed, within 5 working days of the day the event was identified. A standard reporting form will be created by the Storm Water Program to be used by all City departments to facilitate consistency and maintain clear communication with the Regional Board. The report will contain the following information:

- Description of the event and it's cause;

- Duration of the event;
- Time the event is expected to continue if it has not been corrected;
- Steps taken to correct the non-storm water discharge event.

Education & Training

1. Internal/Municipal Education:

The City of San Diego plans to conduct two levels of education and training for staff: General and Activity Specific. All staff will receive a basic introduction to the issue via a "General Storm Water" workshop created by the General Services Storm Water Pollution Prevention Program. Additionally, those departments or work groups that perform work activities specifically identified in, and affected by, the Permit will create and execute and fund Activity Specific training sessions to introduce new work processes, functions and behaviors that incorporate the Best Management Practices (BMPs) necessary for staff to prevent illegal discharges into the City's storm water collection and conveyance system and recreational waters. Additionally, the Departments will fund the External Education and Outreach elements in this plan. All education and outreach covered by the permit shall contain the phrase, "Another City of San Diego Think Blue Program protecting our beaches, bays and watersheds."

A) General Storm Water Training Funded By the Storm Water Program:

The General Storm Water workshops, while created and funded by the Storm Water Program, are primarily being given by trainers to the staff of their respective departments. And, Items 2, 3, 4, 5 and 6, below, are the educational materials created for the workshops. A "Train the Trainer " workshop was also created and given by the Storm Water Program (Item 7) to familiarize the trainers on the material and subject matter prior to rolling out the General Training workshop to their department staff.

Table 2.1.5-2. Storm Water Program General Training.

ITEM	AVAILABLE
1. Clean Water Leader/3-Cs BMP Reference Card	July 2001
2. General Storm Water Training Video	October 2001 To be completed by June 2002
3. City Employee Brochure	October 2001
4. Stop Pollution Pad	October 2001
5. Employee Knowledge & Behavior Survey. To be given before and after each General Storm Water Workshop by department trainers	October 2001

ITEM	AVAILABLE
6. Frequently Asked Questions for department Trainers	October 2001
7. Train the Trainer Sessions. Training of department trainers on content and materials for the General Storm Water Workshops	September 10-14, 2001
8. Storm Water Newsletter	July/August 2002*

* Note that Items 1 through 7 occurred in FY 2002 for city-wide distribution, and that Item 8 is slated for Fiscal Year 2003 and reflects an estimated available date.

B) Activity Specific Storm Water Best Management Practices Training(s):

The Park and Recreation Department will work closely with the Storm Water Program to create a complete training module for staff and to establish a system to update and improve the information and training materials available to staff.

Table 2.1.5-3. Department Training Activities.

ITEM	AVAILABLE*
1. Identify needs, create materials and execute Activity Specific trainings/workshops	Completed by February 2003
2. Memo distributed to staff outlining the importance of the Storm Water Program	July 2001
3. Include storm water issues in park and recreation newsletter	August 2001
4. Provide Storm Water overview to all supervisors associated with parks and recreational facilities	October 2001
5. Establish focus groups and select supervisors to meet and establish process for developing BMPs	December 2001
6. Focus group to establish draft BMP list.	April 2002
7. Develop and implement storm water policies and develop plan for job specific tailgates.	June 2002
8. Conduct job specific tailgates.	Through December 2002
9. Create Storm Water BMP Reference Binders for Staff	Completed by February 2003
10. Annually update BMP Reference Binders and provide refresher trainings	June 2004
11. Storm Water BMP Bulletin Boards in key Employee Area(s)	February 2003

ITEM	AVAILABLE*
12. Create and post Activity Specific Storm Water BMP posters in key employee areas	February 2003
13. Create and post Storm Water pollution prevention signage in areas where vendor, contractor and staff activities pose a risk of illegal discharge(s).	January 2003
14. Train new employees on Storm Water activities. General and Activity Specific to be conducted by supervisor	New Employee Orientation

* Note the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.

2. External Education:

Employees and volunteers will work with in conjunction with outside committees (such as recreational councils), agencies, and contracted vendors in sharing storm water pollution materials wherever appropriates. All materials shared will be reviewed by the Storm Water Pollution Prevention Program staff to ensure consistency in the materials and the messages that are being shared throughout the city.

Table 2.1.5-4. Department External Education Activities.

ITEM	AVAILABLE *
1. Facility visitor information provided and posted in various locations on the site about the proper disposal of liquids, litter and other polluting discharges --including use of Recreational Vehicle waste disposal sites, disposal of animal wastes, and other activities-- that users may generate and will migrate via streets, parking lots, recreation areas to the storm drain system and into our local recreational waters. Users will be notified of the potential for fines.	September 2002
2. Modify existing event and group party brochures and permit materials to inform them of storm water pollution prevention regulations and the corresponding acceptable activities and behaviors at recreational facilities and events. Groups and event parties will be notified of the potential for fines for failing to comply with the regulations.	March 2002
3. Send informational memo to contracted vendors and contractors about policies regarding Storm Water Pollution Prevention and the City's expectations of the contractors and their staff. Include brochure.	January 2002
4. Promote and Advertise Clean-up events at local Park and Recreation Facilities. Use various media such as: flyers, posting of event notices, press releases, Annual Clean-up Event Calendar brochure, and PSA radio and news copy to be aired with the General Services media buy.	November 2001
5. Provide access to the City's General Storm Water Training video to all contracted vendors and franchises to show their employees as one element of their employee Storm Water BMP training.	November 2001

ITEM	AVAILABLE *
6. Post facility user information in appropriate locations about the disposal of liquids, litter and other polluting discharges that facility user activities may generate and have the potential to migrate to the storm drain system or receiving waters. Users should be notified of the potential for fines.	February 2002
7. Create and post Storm Water pollution prevention signage in areas where vendor and contractor activities pose a risk of illegal discharge(s).	February 2002
8. Create and Post Clean Water materials at 53 recreation centers, 13 swimming pools, 11 Senior Centers and 7 Open Space Parks in kiosks, or bulletin boards in facilities and on trails.	September 2002
9. Train and educate members of Recreation Councils and the Park and Recreation Advisory Board on the General Storm Water training video and education component. And, provide training and materials to new members of each group	February 2003
10. All publicly funded education/outreach covered by the permit shall contain the phrase “Another City of San Diego Think Blue program protecting our beaches, bays and watersheds.”	November 2001
11. All new development shall use Storm Drain Concrete stamps OR Thermoplastic reflective pavement markings or stencils that are bilingual (English and Spanish), and read “No Dumping! Drains to Ocean (Bay).”	January 2002

* Note the completion dates listed are estimated. Actual completion dates may vary depending upon other program factors.

2.1.5.3 Phasing

The following activities are currently planned for implementation:

Year 1 (July 1, 2001 – June 30, 2002):

- Prepare/Implement education program
- Develop storm water policies/BMPs for specific activities
- Implement existing activities that are considered “storm water practices”

Year 2 (July 1, 2002 – June 30, 2003):

- Implement Year 2 storm water practices
- Prepare projected storm water budget
- Education activities
- Prepare & submit annual activities report
- Assess, revise budget

Year 3 (July 1, 2003 – June 30, 2004):

- Implement Year 3 storm water practices
- Education activities
- Prepare & submit annual activities report
- Assess, revise budget

Year 4 (July 1, 2004 – June 30, 2005):

- Implement Year 4 storm water practices
- Education activities
- Prepare & submit annual activities report
- Assess, revise budget

Year 5 (July 1, 2005 – June 30, 2006):

- Implement Year 4 storm water practices
- Education activities
- Prepare & submit annual activities report
- Assess, revise budget

Actual implementation of the activities listed above is dependent upon identification of funding in future yearly budgets and City Council approval.

2.1.5.5 Annual Assessment

The following form is representative of the quantitative and qualitative measures that will be tracked by the Storm Water Program regarding the Landscape & Recreational Facilities component in order to prepare the Jurisdictional Urban Runoff Management Program annual assessment. ***These assessment factors and questions are presented for information only; some questions may be modified prior to each annual assessment period, and not all of the factors or questions below may apply to each component's responsible department(s)***. Prior to each fiscal year, a tailored Annual Assessment Form will be distributed to responsible departments, and will include an Excel spreadsheet containing direct and indirect quantitative and qualitative measures similar to the example below. The Storm Water Program will provide a blank copy of the Annual Assessment Form and additional guidance to department management prior to the beginning of each fiscal year. Submission of this report will require department director approval.

Program Assessment Form - Municipal Facilities Operations and Management – Landscape & Recreational Facilities

QUANTITATIVE ASSESSMENT:

Activity	Quantity	Units	Comments
Number of high priority municipal facilities		#	
Number of high priority municipal facilities targeted for inspection		#	Due to calendar-year vs. fiscal year, staffing, budget, etc., as well as Permit Section F.3.b.(6)(d), the number of sites targeted for inspection may be less than the actual number of sites.
Number of high priority municipal facilities inspected		#	Number of sites (not the number of inspections, which may or may not be the same).
Number of medium and low priority municipal facilities inspected		#	See above.
Quantity of material removed from MS4		tons	direct measure; report in tons.
Quantity of debris removed that could have enter MS4 (i.e. street sweeping, litter removal)		tons	direct measure; report in tons.

QUALITATIVE ASSESSMENT:

1. Describe the major accomplishments of this component over the past year.

2. Summarize the educational and outreach activities conducted for this component over the past year to educate staff on water quality principles.

3. Summarize new activities or improvements to be implemented next year as a result of your self-assessment.

4. Other comments.

FINANCIAL ASSESSMENT:

Estimated annual storm water expenditures:

Personnel Expenditures: _____

Non-personnel Expenditures: _____